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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,422	04/16/2004	Shinji Osawa	NKS-005	9937

20374 7590 12/01/2005

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900 17TH STREET NW  
WASHINGTON, DC 20006

EXAMINER
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FOREMAN, JONATHAN M

ART UNIT	PAPER NUMBER
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3736

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/825,422

Applicant(s)

OSAWA ET AL.

Examiner

Jonathan ML Foreman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/31/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 8/31/04 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been placed in the application file, and the information referred to therein has been considered by the examiner as to the merits.

### ***Specification***

1. The disclosure is objected to because of the following informalities: Page 12, line 4 states “proximal coil wire 11”. Previously, the reference numeral “10” has been used to describe the “proximal coil wire”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,934,380 to de Toledo.

4. In regards to claims 1, 3 and 6, de Toledo discloses a core wire (12) formed with a mounting portion at a distal end portion; and a plurality of coil wires (14, 18) being fitted onto the mounting portion substantially in tandem and having different mechanical properties (Col. 4, lines 8 – 10; lines 18 – 20), the adjacent coil wires being connected with each other at the corresponding ends thereof, wherein one of ends is formed into a tapered portion gradually reducing in outer diameter toward the end (Col. 4, lines 10 – 14; Lines 28 – 32), and wherein the other corresponding end is formed

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into a receiving end portion into which the tapered portion is inserted. The proximal side coil (14) is formed with the tapered portion.

5. Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,234,437 to Sepetka.

In regards to claims 1, 3, 5 and 6, Sepetka discloses a core wire (12) formed with a mounting portion at a distal end portion; and a plurality of coil wires (13, 20) being fitted onto the mounting portion substantially in tandem and having different mechanical properties (Col. 3, lines 4 – 9; lines 56 – 61), the adjacent coil wires being connected with each other at the corresponding ends thereof, wherein one of ends is formed into a tapered portion (Col. 3, line 44) gradually reducing in outer diameter toward the end, and wherein the other corresponding end is formed into a receiving end portion (Col. 3, line 62 – Col. 4 – line 11) into which the tapered portion is inserted. The proximal side coil (20) is formed with a tapered portion. The most distal coil wire is formed of a radiopaque material (Col. 3, lines 4 – 7). The length of the insertion of the tapered portion into the receiving portion is 2% to 40% of the whole length of the coil wire having a receiving end portion (Col. 3, lines 11 – 12; lines 28 – 33).

6. Claims 1 – 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,551,444 to Finlayson.

In regards to claims 1 – 3 and 6, Finlayson discloses a core wire (12) formed with a mounting portion at a distal end portion; and a plurality of coil wires (16, 20) being fitted onto the mounting portion substantially in tandem and having different mechanical properties (Col. 3, lines 2 – 7), the adjacent coil wires being connected with each other at the corresponding ends thereof, wherein one of ends is formed into a tapered portion (16b) gradually reducing in outer diameter toward the end, and wherein the other corresponding end is formed into a receiving end portion

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into which the tapered portion is inserted (Col. 3, lines 8 – 20). Finlayson discloses a plurality of transitional portions (12a, 12b, 12c) continuously disposed in the axial direction, and reduced gradually in outer diameter toward the distal end; and a distal end portion formed into a plate shape (12d), wherein the taper ratio of the most proximal transitional portion is larger than that of other transitional portions (See Table 1). The proximal side coil is formed with a tapered portion. The most distal coil wire is formed of a radiopaque material (Col. 3, line 5).

7. Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,640,970 to Arenas.

8. In regards to claims 1, 4 and 6, Arenas discloses a core wire (22) formed with a mounting portion at a distal end portion; and a plurality of coil wires (28, 36) being fitted onto the mounting portion substantially in tandem and having different mechanical properties (Col. 3, lines 63 – 65; Col. 4, lines 28 – 32), the adjacent coil wires being connected with each other at the corresponding ends thereof, wherein one of ends is formed into a tapered portion (41, 44) gradually reducing in outer diameter toward the end, and wherein the other corresponding end is formed into a receiving end portion into which the tapered portion is inserted.. The pitches of the receiving end portion of the coil wire are formed to be larger than those of the remaining portion (Col. 4, lines 20 – 24). The most distal coil wire is formed of a radiopaque material (Col. 4, lines 28 – 32).

9. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,833,631 to Nguyen.

In regards to claims 1, 3 and 6, Nguyen discloses a core wire (102) formed with a mounting portion at a distal end portion; and a plurality of coil wires (308, 310) being fitted onto the mounting portion substantially in tandem and having different mechanical properties in that the different shapes of the coils would lead to different mechanical properties, the adjacent coil wires being

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connected with each other at the corresponding ends thereof, wherein one of ends is formed into a tapered portion (Figure 3) gradually reducing in outer diameter toward the end, and wherein the other corresponding end is formed into a receiving end portion into which the tapered portion is inserted. The proximal side coil (308) is formed with a tapered portion. The most distal coil wire is formed of a radiopaque material (Col. 4, lines 66 – 67).

### ***Conclusion***

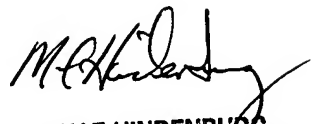
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 5,103,543 to Hodgson.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan ML Foreman whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JMLF

  
MAX F. HINDENBURG  
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